





Prepared By

M/S P.K. Enterprises

G-Sector ,Naharlagun , P.O/PS- Naharlagun , Papum Pare Arunachal Pradesh

In Consortium with



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M/S Indiavision Realty & Infrastructure Pvt Ltd

A-25, Second Floor, Sector 3, NOIDA — 201301

PARTICIPANT HANDOUT ASSISTANT BAR BENDER & STEEL FIXER



Arunachal Pradesh Building & Other's Construction workers welfare board (APB&OCWWB)

ESS Sector, Itanagar-791110

Assistant Bar Bender & Steel Fixer



Role Description

This job role is responsible for identification, handling and use of tools and tackles, materials and equipment. The responsibilities also include reading and understanding reinforcement bar details from hand sketches and bar bending schedule, performing cutting, threading and manual bending of rebar and fabricating, placing and fixing of reinforcement bar at the desired location using correct ties within specified time and tolerance. The individual should have good knowledge about the environment, health, safety and safe working practices and about proper handling of rebar.

What RPL Means?

Recognition of prior learning (RPL): It is an assessment process that involves assessment of an individual's relevant prior learning (including formal, informal and non-formal learning) to determine the credit outcomes of an individual candidate knowhow.

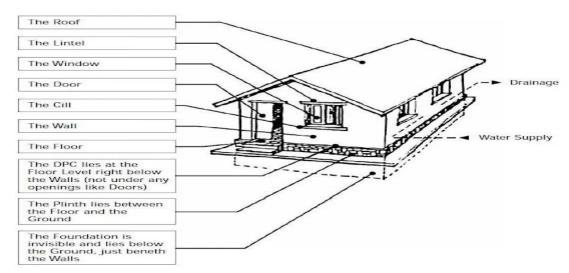
Why RPL?

- Because Construction workers do not have a certificate which tells us about their skill level
- Because construction workers do not get paid according to skill level

Applicable National Occupational Standards (NOS

- CON/N0101: Erect and dismantle temporary scaffold of 3.6 meter height
- CON/NO214: Read and understand reinforcement bar details from hand sketch
- CON/NO215: Use and maintain materials, tools and equipment relevant to reinforcement works
- CON/NO216: Perform cutting and manual bending of rebar for simple shape
- CON/NO217 Assist in fabrication, placing and fixing of rebar for pre-fabricated and in-situ RCC structures.
- CON/N8001: Work effectively in a team to deliver desired results at the workplace
- CON/N9001: Work according to personal health, safety and environment protocol at construction site

List and describe parts and functions of a building



Foundation & Plinth Damp Proof Course (DPC) Floor & Wall
Lintel Cill Stair

Surfaces/ Finishes Drainage Water Supply Electrical Supply

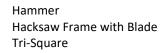
Door & Window

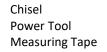
Roof

Tools and materials used in construction



Tools





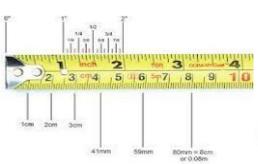
Bar Bending Lever Plumb Bob Bending Plate Bar Binding Hook Water Level tube Angle Grinder











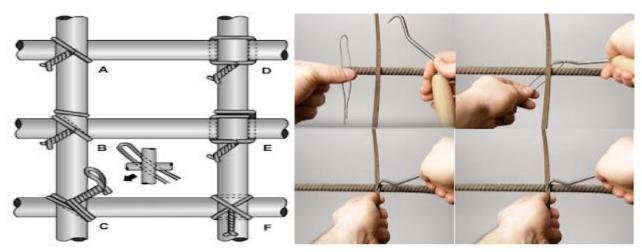


Material

Re Bars Binding Wire Props Scaffolding Materials Chalk

Types of Tie Rebars

Following ties as shown in figure



SIMPLE, TIE. (View A)
SADDLE TIE. (View D)

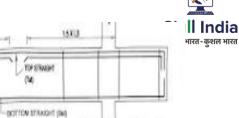
WALL TIE. (View B)

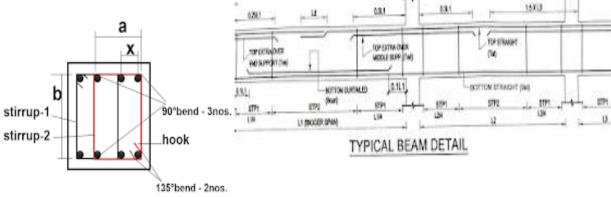
SADDLE TIE WITH TWIST. (View E)

DOUBLE-STRAND SINGLE TIE. (View C)

CROSS, OR FIGURE-EIGHT, TIE. (View F)

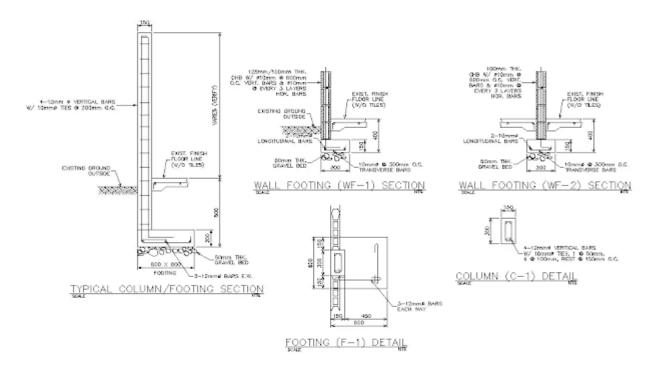
Cutting, Bending & Binding



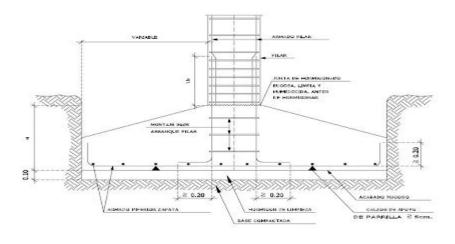


Stirrups/Rings

Beam



Wall/ Column



Footing

PERSONAL PROTECTIVE EQUIPMENT









Safety Goggles







Safety Helmet



Safety Shoes

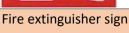
Safety Gloves

Safety Belt

Safety Requirement

- Safe access and working platform.
- Lifeline of suitable material like manila rope of 16mm diameter for anchoring the belt.
- Warning for people below through display of caution board and cordoning off the area if necessary
- Work at height should be performed in good daylight, preferably when strong winds do not exist.
- Anchor safety belt while working at height should be ISI marked (BIS approved).







Emergency exit sign



No smoking sign



First aid sign



No open flame sign

Comply with Industry, Regulatory and Organizational Requirements

It is very important for all the employees to comply with industry standards and be aware of various rules, regulations, policies and procedures followed by the company. Apart from educating themselves, it is also important to maintain good relationships with peers, seniors, juniors and all employees. One should be able to make the right decision which is good for the greater good of the company.

Team Work



This is all about being an effective worker.

- Safe worker
- Worker who is responsible for the quality of their work
- Worker that communicates well and works as a team member, sharing information.
- Worker that accepts change
- Worker that plans their daily work Planning is essential regardless of your job role
- Responsibilities because as a worker you are part of a group or team.
- This might be a small team of two, or a large team such as a company or an organisation.
- It is very rare for someone to work completely alone.
- If we bond together and support each other.
- If we make true the spirit of teamwork.
- Regardless of our differences, we can rise to meet our challenges.
- If we are aware of the feeling of sharing.
- LIFE WILL BE EASIER AND THE PASSING OF YEARS MORE FULFILLING.

Future possible progression and career development provisions on completion of the course

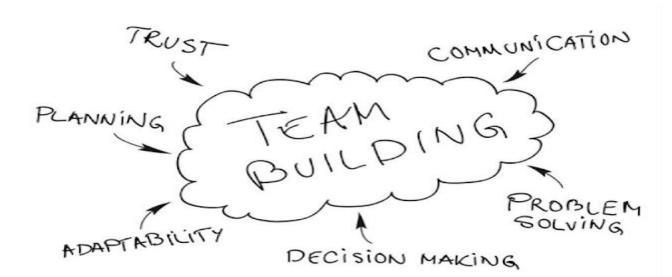
Foreman

Head Bar Bender

Bar Bender & Steel Fixer

Assistant Bar Bender

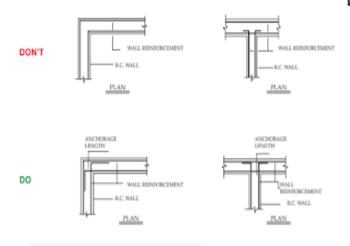
Helper



Do's and Don'ts during Construction

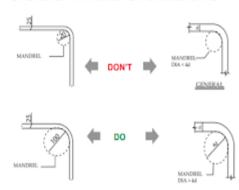
Skill India कौशल भारत-कुशल भारत

REINFORCEMENT AT WALL INTERSECTIONS



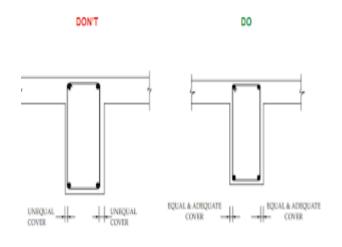
DO'S AND DONT'S IN REINFORCEMENT DETAILING

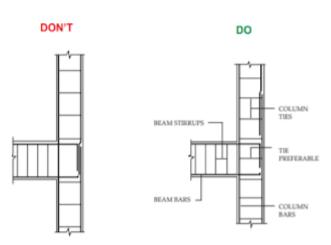
CHOICE OF MANDREL FOR BAR BENDING



UNEQUAL COVERS IN BEAMS

BAR LAPPING AT COLUMN - BEAM JUNCTION





Useful Notes:

- 1 Bag of Cement
- 1 Cubic Meter of Cement
- Grades of Cement
- Standard size of Plywood
- Standard size of measuring box for concrete
- 1 Yard
- 1 Meter
- 1 Inch
- 1 Feet
- 1 Kilogram
- Area Calculate
- Volume Calculate
- Length measured in
- Liquid measured in
- Steel Measured in
- Sand & Aggregate measured in
- Cement Measured in
- Nails measured in
- Calculation of 1 Meter Steel Bar

- = 50 Kg
- = 28.8 Bags
- = 33,43,53 (N/mm2)
- = 8 Feet X 4 Feet
- = 1' X 1' X 1.25' (1.25 Cuft)
- = 3 Feet
- = 3.28 feet
- = 2.54 CM
- = 305 MM
- = 1000 Gram
- = Square
- = Cubic
- = Linear
- = Liter
- = KG
- = Volume and Weight
- = Bags and Weight
- = KG
- = D2/162



Covid-19 health and safety protocols

Coronavirus health and safety tips



Wash your hands often



Use hand sanitizer



Wear a mask



Don't touch your face







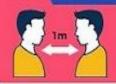








Protective measures against Coronavirus



A distance of at least 1 meter is necessary to ensure safety for all



Wash your hands with soap and water regularly



If soap and water is not available, use hand sanitizer with at least 60% alcohol



Wash hands before touching eyes, nose and mouth



Throw used tissues into closed bins immediately after use



Cover your nose and mouth with handkerchief/tissue while sneezing and coughing



Avoid mass gathering and crowded places

If you are experiencing symptoms like fever, cough or difficulty in breathing, please call the state helpline number or 24x7 helpline numbers of Ministry of Health and Family Welfare, Government of India and follow the instructions.



Notes:		
		

Handout_ Assistant Bar Bender & Steel Fixer (QP Code - Con/Q202)

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THANK YOU FOR PARTICIPATING IN

THE TRAINING PROGRAM